



GAU 2834

Attorney's Docket No.: 05770-082001 / ASC-382

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Swarn S. Kalsi  
Serial No. : 09/371,692  
Filed : August 10, 1999  
Title : SUPERCONDUCTING ELECTRIC MOTOR

Art Unit : 2834  
Examiner : G. Perez

Commissioner for Patents  
Washington, D.C. 20231

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#8/Response  
R. Kalsi  
3/24/01

RESPONSE

In response to the office action mailed on December 20, 2000, please consider the remarks below:

REMARKS

Applicant draws attention to the recitation in claim 1 of "at least one superconducting winding." *Rabinowitz*<sup>1</sup> does not teach or suggest a rotor assembly having a superconducting winding. In fact, *Rabinowitz* teaches away from the inclusion of a superconducting winding in a rotor assembly.

In discussing the structure of the rotor assembly *Rabinowitz* teaches that

"The superconducting material can be in any of a variety of forms, including particulate, foil, bulk, and thin film, superconducting materials. Because it is in a non-wire form, *instead of one or more windings* of wire, the motor/generator can be implemented with substantially any superconducting material, including those that are too brittle to be easily and/or cost effectively formed as superconducting wires."<sup>2</sup>

In contrast, Applicant's claimed invention specifically recites superconducting windings.

<sup>1</sup> *Rabinowitz et al.*, U.S. Patent No. 5,325,002, issued June 28, 1994.

<sup>2</sup> *Rabinowitz*, col. 5, line 64 to col. 6, line 3 [emphasis supplied].

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

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3/20/01

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In the illustrated embodiment, these windings take the form of pairs of pancake coils.<sup>3</sup> These coils are formed from superconducting tape using a method disclosed in U.S. Patent No. 5,581,220, which is assigned to the assignee of the present invention and incorporated by reference into the present disclosure.

Whether or not *Higashi*,<sup>4</sup> or any other reference, teaches the missing superconducting winding recited in Applicant's claim 1 is moot. Since *Rabinowitz* explicitly teaches away from such a winding, it is difficult to find any incentive for combining the teaching of *Rabinowitz* with any reference that teaches a superconducting winding.


The remaining independent claims 17 and 21 each require a rotor assembly having "at least one superconducting winding which, in operation, generates a flux path within the rotor assembly." Accordingly, Applicant reasserts the foregoing arguments in connection with those claims.

Applicant submits that independent claims 1, 17, 21 and all claims dependent thereon are free of the cited art. Accordingly, Applicant requests allowance of those claims.

No additional fees are believed to be due in connection with the filing of this response. However, if additional fees are due, please charge our Deposit Account 06-1050.

Respectfully submitted,

Date: March 19, 2001

  
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<sup>3</sup> Applicant's specification, page 8, line 25 to page 9, line 10.

<sup>4</sup> *Higashi*, U.S. Patent No. 4,885,494, issued December 5, 1989.